**Economic and Community Development** 

## V(A). Planned Program (Summary)

## 1. Name of the Planned Program

**Economic and Community Development** 

## V(B). Program Knowledge Area(s)

## 1. Program Knowledge Areas and

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
605	Natural Resource and Environmental Economics	0%	10%		
608	Community Resource Planning and Development	0%	50%		
803	Sociological and Technological Change Affecting Indiv	0%	20%		
804	Human Environmental Issues Concerning Apparel, Te:	100%	0%		
805	Community Institutions, Health, and Social Services	0%	20%		
	Total	100%	100%		

## V(C). Planned Program (Inputs)

## 1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Exter	Extension		Research	
	1862	1890	1862	1890	
Plan	18.7	3.9	0.0	0.0	
Actual	17.5	4.1	0.0	0.0	

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 332693	1890 Extension 242987	Hatch 0	Evans-Allen 0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
417372 <b>1862 All Other</b>	242987 <b>1890 All Other</b>	0 1862 All Other	0 1890 All Other
1939913	427997	0	0

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## V(D). Planned Program (Activity)

## 1. Brief description of the Activity

The primary activity described herein is ETP 21D &ndash Alabama Radon Education Program. It does not encompass the full group of targets from the Plan of Work.

Radon is a national health risk that, according to the U.S. Environmental Protection Agency, is estimated to cause 21,000 lung cancer deaths per year in the United States. The EPA estimates that 1 in 15 homes across the U.S. have elevated levels of radon. Backed by extensive research, the U.S. Surgeon General has warned that radon is the second leading cause of lung cancer behind smoking in the U.S. today. It is the leading cause of lung cancer in nonsmokers.

Radon is called the "silent killer" because it is a colorless, odorless, tasteless gas that cannot be detected without specifically testing for it. It occurs naturally in most soils and is in the air we breathe. Although radon gas dissipates in the air outside, it can enter a home or building through foundation cracks and openings around pipes. Once inside, it gets trapped and can build to high levels. This build-up increases the risk of lung cancer. Testing is the only way to determine if a home has elevated levels of radon. The Surgeon General recommends testing all homes because the home is where families spend the most time.

The Alabama Radon Education Program has been a grant-funded program of the Alabama Department of Public Health and the U.S. Environmental Protection Agency since October 1997. The program concentrates its efforts in 14 Zone 1 counties, Calhoun, Clay, Cleburne, Colbert, Franklin, Jackson, Jefferson, Lauderdale, Lawrence, Limestone, Madison, Morgan, Shelby and Talladega, that have the highest incidence for elevated radon levels.

### The Radon Education Program seeks to

- · Increase the public's awareness to the health risks of radon and encourage people to take action to reduce the risk of radon-related lung cancer.
- Encourage testing
- Encourage mitigating homes with elevated radon levels. While no amount of radon is considered "safe," the EPA recommends remedial action when tests indicate 4 picocuries per liter (pCi/l).
- Encourage building new homes radon-resistant
- · Encourage testing in real estate transactions

## To accomplish these tasks, the program

- · Provides workshops, meetings and programs to civic and community groups, work-place safety meetings, school and youth groups, Realtor and homebuilder associations, senior and adult education groups, medical groups and local governmental entities.
- · Works with the media
- Provides low-cost radon test kits to the public
- Partners with other organizations, libraries, medical groups
- · Produces a quarterly newsletter

## 2. Brief description of the target audience

The Radon Program seeks to inform both adults and youth, without regard to race, color, national origin, religion, sex, age, veteran status, or disability. Its target audience includes homeowners, homebuilders, Realtors, home appraisers, home inspectors, code officials, medical professionals, policy makers and the general public. Some of the areas that audiences are reached include schools and youth groups, civic and community groups, senior and adult education programs, Realtor and homebuilder associations, medical offices, libraries and local government entities.

The program promotes the radon message to anyone who lives in a home or works in an office building, as radon is a health risk when trapped in buildings.

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## V(E). Planned Program (Outputs)

## 1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

Year	Direct Contacts Adults Target	Indirect Contacts Adults Target	Direct Contacts Youth Target	Indirect Contacts Youth Target
Plan	130000	530000	25000	100000
2007	8790	666302	6416	0

## 2. Number of Patent Applications Submitted (Standard Research Output)

## **Patent Applications Submitted**

Year **Target** Plan: 0 2007:

## **Patents listed**

## 3. Publications (Standard General Output Measure)

Number of	Peer Re	viewed	Publ	ications
	Fyte	nsion		

	Extension	Research	Total
Plan			
2007	22	1	23

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## V(F). State Defined Outputs

# Output Target Output #1

#### **Output Measure**

? This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in the prior "outcome activities and methods sections." The success of many of these outcomes will be formally evaluated/measured by using individual activity evaluation forms designed specifically for each activity, the success of other activities and methods will be measured by the level of participation in the activity. In the target boxes below for each year, we are indicating the number of individual activities within the ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.

Year Target Actual 2007 4 0

## Output #2

#### **Output Measure**

? Test kits offered for purchase

Year Target Actual 2007 {No Data Entered} 2388

## Output #3

## **Output Measure**

? Number of TV programs

Year Target Actual 2007 {No Data Entered} 5

## Output #4

#### **Output Measure**

? Number of Radio spots submitted

Year Target Actual 2007 {No Data Entered} 10

## Output #5

#### **Output Measure**

? Number of News articles submitted

Year Target Actual 2007 {No Data Entered} 19

#### Output #6

#### **Output Measure**

? Newsletters with Radon information

Year Target Actual 2007 {No Data Entered} 17

## Output #7

## **Output Measure**

? Number of exhibits

Year Target Actual 2007 {No Data Entered} 120

## Output #8

#### **Output Measure**

? Medical Professionals contacts

Year Target Actual 2007 {No Data Entered} 41

## Output #9

#### **Output Measure**

? Homebuilder contacts

Year Target Actual 2007 {No Data Entered} 103

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## Output #10

## **Output Measure**

? Home Inspector contacts

Year Target Actual 2007 {No Data Entered} 17

Output #11

## **Output Measure**

? number of Realtor programs

Year Target Actual 2007 {No Data Entered} 18

Output #12

## **Output Measure**

? Adult Group meetings

Year Target Actual 2007 {No Data Entered} 102

Output #13

## **Output Measure**

? 4-H and other youth meetings

Year Target Actual 2007 {No Data Entered} 162

Output #14

## **Output Measure**

? Club leaders trained

Year Target Actual 2007 {No Data Entered} 22

Output #15

## **Output Measure**

? Homeowners referred to mitigators

Year Target Actual 2007 {No Data Entered} 64

Output #16

## **Output Measure**

? Proclamations acquired

Year Target Actual 2007 {No Data Entered} 9

Output #17

## **Output Measure**

? Total literature distributed

Year Target Actual 2007 {No Data Entered} 47876

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## V(G). State Defined Outcomes

O No.	Outcome Name
1	Outcomes from this program area include: a) Number of community and economic development programs conducted, b) Community and economic development training resources developed, c) Number of community and economic development projects conducted
2	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location the county or counties involved. Who and how many: The &Idquowho” includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to &Idquosuccess&rdquo. The basic question to be answered in this part is &Idquowhat difference did this program make&rdquo. The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.
3	Number of test kits purchased as a result of a program, activity or media report
4	Number of people who actually use a test kit compared to the number who purchased or received a kit
5	Number of homes that were mitigated
6 7	Number of new homes built radon-resistant  Number of homes tested during a real estate transaction.
8	Number of municipalities that adopted the radon control Appendix F with their building code.
0 9	Success story 1: The annual Huntsville/Madison County Building, Home, and Remodeling Show took place March 2-4 at the Von Braun Civic Center. The Alabama Radon Program, in its seventh year of participation, provided an educational display booth, complete with a radon system, publications and test kits. A seminar was offered on Sunday. The show drew 15,057 attendees. Three hundred seventy-four test kits and more than 3,300 pieces of literature were distributed. Extension staff members who worked at the show included Patricia W. Smith (Radon Regional Extension Agent), Walter Harris (Madison County Extension Coordinator), Walter Rodgers (Regional Extension Agent-REA), Shirley Whitten (REA), Clarene Johnson (Extension District Director), Teresa McDonald (Colbert County Extension Coordinator), Karen Thompson (REA), Laura Booth (Extension Associate), Holly Cannon (Radon Assistant) and Susan Roberts (Assistant Program Director). Assistance was provided by certified mitigators and testers, who helped answer technical questions. About 170 people (45%) who purchased test kits at the home show have tested their homes and 26% of the homes have indicated high radon levels. The Radon Program is a member of the builders association. Members include the program's target audience: builders, remodelers, developers, subcontractors, suppliers, financial institutions, Realtors and other trades that are connected with the home building industry.

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- Success story 2: The Alabama Radon Program exhibited a display at the 2007 Shoals Home Builders Association's annual Spring Building and Remodeling Show Feb. 24-25, in Florence. ACES staff members involved were Radon REA Patricia W. Smith, Teresa McDonald, Colbert County CEC, Katrina Cole, Colbert County 4-H Extension Agent, Melanie Allen, Lauderdale County 4-H Extension Agent, Francine Creecy, Lauderdale County Extension Reporter, and Mary J. Andrews, Lauderdale County REA. Certified mitigator Leon Singletary was also on hand to answer technical questions. The booth highlighted the dangers posed by radon and emphasized methods of removing radon where high levels exist. One attendee said 'For 15 years I have been meaning to get around to doing this (test his home for radon). Okay, talk to me about radon and how do I do this?' The attendee purchased and used the test kit and found negligible levels of radon in his home. The ACES Alabama Radon Education Program booth was one of 81 booths at the show. Over 2,000 individuals attended the home show. Over 650 pieces of literature were distributed. In addition to distributing literature and explaining the dangers of radon and mitigation techniques, radon test kits were sold to interested citizens. More than 40 test kits were sold at this two-day event. Twenty-six (62%) test kits were used and five homes out of 22 valid tests (22%) indicated a need for mitigation. The Alabama Radon Education Program is a member of the builders association which has a membership of over 400 business firms from the Shoals area of northwest Alabama. Its membership includes the program's target audience of builders, remodelers, developers, subcontractors, suppliers, financial institutions, Realtors and other trades that are connected with the home building industry.
- Success story 3: The Radon in Alabama Web site, introduced in July 2000, offers a multitude of resources for those wishing to learn more about radon in Alabama. Alabama citizens can order test kits through Extension on the web site. Since its inception, 139 test kits have been purchased from the site, with 76 (54%) of the test kits used. Eight of 40 homes (20%) tested had elevated levels of radon, indicating a need to mitigate.

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Success story 4: Throughout the year, the Alabama Radon Program actively promotes radon education, but in January, special emphasis is made to pick up the pace with increased awareness emphasis for National Radon Action Month (NRAM). This year's activities took on a national flavor, with EPA offering a special web site of NRAM activities featured in each state: www.epa.gov/radon/rnactionmonth.html# Radon\_Events\_in\_Your\_Area, where citizens, radon industry, radon state programs and others could view the events, get ideas and/or join in the activities. In Alabama, national media interest for NRAM provided an added stimulus for local media interest in radon health risk promotions. News report headlines such as 'What you don't know about radon gas could kill you, and 'Agent says radon a problem in the area,' helped draw attention to the radon message, resulting in a dramatic increase in radon test kit purchases and testing. Radio talk show hosts took a special interest in our message. Pat Smith, Radon Regional Extension Agent, and Teresa McDonald, Colbert County Extension Coordinator (CEC), were featured on the radio program, 'A Look at the Shoals,' and Deborah Mathews, Cleburne CEC, was featured several times during NRAM on WPIL FM Radio and WTDR FM Radio. In addition to the talk shows, numerous radio stations in north Alabama played the EPA-provided national PSAs which were localized for Alabama. We were also able to appear in several TV programs during the month. Pat Smith was on 'For Your Information,' a Shoals Community College TV show that was shown continuously in January and February, and 'Talk of the Town on the Light Side of the News' on WYAM TV 56. In Cleburne County, Mathews was fortunate to appear on the Wake-Up Alabama show on WJXS TV. In addition to county media efforts, the Alabama Department of Public Health sent out a statewide press release that generated awareness among health department associates as well as the news media. On the local level, the program's radon agents brought the radon health risk message to many local government officials, resulting in nine proclamations declaring January as National Radon Action Month within their communities, including a state proclamation signed by Governor Riley. The proclamations came from the Madison County Commission, Clay County Commission, Talladega County Commission, City of Killen, City of Sheffield, City of Muscle Shoals, Colbert County Commission, and the City of Tuscumbia. Many events were scheduled within each county. Highlights from each county include a Community Radon Awareness Forum arranged by Agent Walter Rodgers and Radon REA Pat Smith in Madison County with several community and business leaders discussing the importance of radon testing and prevention. In Clay County, CEC Marsha Moorehead distributed Radon Activity Books, Radon Ranger comic books and test kit coupons to 22 4-H Clubs and other youth groups in the county. In Cleburne County, CEC Deborah Mathews presented programs to Cleburne High School's anatomy and physiology classes and provided special radon informational assistance to home school groups at the Anniston Museum of Natural History. In Colbert County, CEC Teresa McDonald included NRAM information in the January/February 2007 Home Economics Newsletter distributed to 439 households. In Limestone County, CEC Betty Ann Broman presented a radon program to a local civic group as well as met with officials at Athens/Limestone Hospital to implement the Newborn Program. In Lauderdale County, Agent Melanie Allen provided a special reading activity at the Florence Public Library featuring well known children's literature character, Arthur, reading from the Radon Activity Book. In Lawrence County, 39 youth programs on radon awareness were provided to area youth by CEC Linda Robinson. In Talladega County, CEC Wanda Jurriaans provided a radon program to an RSVP seniors group. Pat Smith provided two Lunch and Learn seminars at Helen Keller Hospital for nurses who received one CEU for attending. She conducted numerous community group programs including the Cedar Garden Club, Cloverdale Community Center, Helen Keller Hospital, Killen Lions Club, Lawrence County Rotary Club, and the East Colbert Senior Center. A total of 74 radon test kits were sold during the group meetings. Exhibits were featured in a variety of locations: Helen Keller Hospital (Colbert County) and Athens-Limestone (Limestone) hospitals featured radon displays and brochures in each of their waiting rooms; the Cleburne County Library in Heflin and the Anniston Museum of Natural History (Cleburne and Calhoun counties); a radon display and test kits for sale at the Shades Mountain Baptist Church Health Expo (Jefferson); radon materials and the radon tabletop display at the Limestone County Market Street Office Building (Limestone); radon posters and a test kit display at the Florence Public Library (Lauderdale); community health fairs in Courtland, county health departments, and the local Moulton and Courtland libraries (Lawrence); and a radon display at the Homemakers Achievement Program and FCE multi-county planning meeting (Talladega). As a direct result of the media reports, exhibits and numerous NRAM programs, more than 900 test kits were purchased from county offices, the radon web site and by mail order during the quarter, and 478 tests were used. More than 400 homes were tested as a result of hearing the radon message during NRAM, with 22% of the homes indicating a need for mitigation.

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#### Outcome #1

#### 1. Outcome

Outcomes from this program area include: a) Number of community and economic development programs conducted, b) Community and economic development training resources developed, c) Number of community and economic development projects conducted

## 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

## 3a. Outcome Type:

Change in Knowledge Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	67	0

#### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

## 4. Associated Knowledge Areas

KΑ	Code	Knowledge	Area
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Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structure

#### Outcome #2

#### 1. Outcome

Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The &ldquowho&rdquo includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to &ldquosuccess&rdquo. The basic question to be answered in this part is &ldquowhat difference did this program make&rdquo. The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.

## 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

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#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	20	0

#### 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

## 4. Associated Knowledge Areas

KA Code Knowledge Area

Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structure

#### Outcome #3

#### 1. Outcome

Number of test kits purchased as a result of a program, activity or media report

## 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

### 3a. Outcome Type:

Change in Knowledge Outcome Measure

## 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	2388

#### 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Radon is called the "silent killer" because it is a colorless, odorless, tasteless gas that cannot be detected without specifically testing for it. When people are educated about the health risks of radon and that the only way to know is to test, then if we are doing our job, people will be moved to 1) purchase a test kit, t hen 2) use the test kit.

#### What has been done

Test kits are offered for purchase at programs and meeting, health fairs and homeshows, at the Zone 1 radon county Extension offices, and on the Radon in Alabama web site, www.aces.edu/radon.

## Results

In 2007, 2388 test kits were purchased from county offices, programs, health fairs, homeshows and online.

## 4. Associated Knowledge Areas

#### KA Code Knowledge Area

Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structure

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## Outcome #4

#### 1. Outcome

Number of people who actually use a test kit compared to the number who purchased or received a kit

### 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

## 3a. Outcome Type:

Change in Action Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	1416

#### 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

When people purchase a test kit, they have exhibited a change of behavior as a result of their increased knowledge. When people use their test kit, there is another action result associated with their increased knowledge.

#### What has been done

We encourage people to test their homes and 1416 people tested their homes for radon in 2007

#### Results

We compare the number of people who used their test kit to the number of people who actually used it and the resultant percentage shows how effective we were in our message. Our results show that 1416 test kits were used out of 2388 test kits purchased, for a 59% success rate.

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential, and Commercial Structure

#### Outcome #5

## 1. Outcome

Number of homes that were mitigated

## 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

#### 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	146

## 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

While no amount of radon is considered "safe," the EPA recommends remedial action when tests indicate radon levels of 4 picocuries per liter (pCi/l) or more. Mitigation involves installing a radon system in the home to prevent radon gas from entering a home and is done by a certified radon mitigator. The mitigator has been specifically trained for the installation and diagnostic process that is involved in retrofitting a home.

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#### What has been done

Test results indicate that 176 homes had elevated radon levels, and 146 homes were reported to have been mitigated in 2007.

#### Results

We compare the number of homes mitigated to the number of homes that tested above the EPA Action Level and the resultant percentage shows the effective rate of mitigations, another measure of our success. Results for 2007 show that 146 homes were reported mitigated in 2007 and our data shows that 176 homes were in need of mitigation, for an 83% success rate.

## 4. Associated Knowledge Areas

## KA Code Knowledge Area

Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structure

#### Outcome #6

#### 1. Outcome

Number of new homes built radon-resistant

## 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

## 3a. Outcome Type:

Change in Condition Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	715

## 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Our message is that radon entry into homes can be eliminated with the use of a radon system. Installing a radon system in a new home, as it is being built, will cost two-thirds LESS than the cost of retrofitting or mitigating an existing home. Radon systems also prevent other soil gases and moisture from entering the home. Municipalities can adopt the radon control Appendix F with their building code, thereby ensuring radon-resistant homes to their community.

#### What has been done

In 2007, 715 radon systems were reported to have been installed in new homes. Most of these homes were built in the 6 municipalities that adopted the radon control Appendix F with their building code and there are a few builders who have committed to build all of their homes with radon systems.

## Results

We do not have any comparison data as to how many new homes were built in 2007, but 715 homes is a very small percentage. Most of these homes were built in the 6 municipalities that adopted the radon control Appendix F with their building code.

## 4. Associated Knowledge Areas

## KA Code Knowledge Area

Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structure

## Outcome #7

#### 1. Outcome

Number of homes tested during a real estate transaction.

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## 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

#### 3a. Outcome Type:

Change in Action Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	379

#### 3c. Qualitative Outcome or Impact Statement

## Issue (Who cares and Why)

Testing a home for radon is purely voluntary in the state. However, consumers can be protected when purchasing a home if they have a radon test done as a condition of their contract, and then mitigated if elevated radon levels are found. Many relocation companies require radon tests in their home purchases and people who move here from other states also ask for radon tests. Some states require a radon test as part of the real estate transaction.

#### What has been done

In 2007, 379 homes were reported as tested during a real estate transaction.

#### Results

We do not know how many homes were purchased in the state in 2007, but we do know that at least 379 homes were tested for radon.

## 4. Associated Knowledge Areas

KA Code	Knowledge Area
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structure

## Outcome #8

#### 1. Outcome

Number of municipalities that adopted the radon control Appendix F with their building code.

#### 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

## 3a. Outcome Type:

Change in Action Outcome Measure

## 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	1

#### 3c. Qualitative Outcome or Impact Statement

#### Issue (Who cares and Why)

Municipalities can adopt the radon control Appendix F with their building code, thereby ensuring the protection of their citizens when purchasing new homes radon-resistant. There are currently 6 municipalities in the state that adopted the appendix: Decatur, Hartselle, Falkville, Trinity, Muscle Shoals and Sheffield.

#### What has been done

Extension offers information and education to local government officials and building code officials.

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## Results

The city of Trinity adopted Appendix F with the building code in 2007.

#### 4. Associated Knowledge Areas

KA Code Knowledge Area

Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structure

#### Outcome #9

#### 1. Outcome

Success story 1: The annual Huntsville/Madison County Building, Home, and Remodeling Show took place March 2-4 at the Von Braun Civic Center. The Alabama Radon Program, in its seventh year of participation, provided an educational display booth, complete with a radon system, publications and test kits. A seminar was offered on Sunday. The show drew 15,057 attendees. Three hundred seventy-four test kits and more than 3,300 pieces of literature were distributed. Extension staff members who worked at the show included Patricia W. Smith (Radon Regional Extension Agent), Walter Harris (Madison County Extension Coordinator), Walter Rodgers (Regional Extension Agent-REA), Shirley Whitten (REA), Clarene Johnson (Extension District Director), Teresa McDonald (Colbert County Extension Coordinator), Karen Thompson (REA), Laura Booth (Extension Associate), Holly Cannon (Radon Assistant) and Susan Roberts (Assistant Program Director). Assistance was provided by certified mitigators and testers, who helped answer technical questions. About 170 people (45%) who purchased test kits at the home show have tested their homes and 26% of the homes have indicated high radon levels. The Radon Program is a member of the builders association. Members include the program's target audience: builders, remodelers, developers, subcontractors, suppliers, financial institutions, Realtors and other trades that are connected with the home building industry.

## 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

#### 3a. Outcome Type:

Change in Action Outcome Measure

### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	374

## 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

#### What has been done

#### Results

374 test kits were purchased; 170 test kits were used; 26% of the homes had elevated radon levels, indicating a need for mitigation.

#### 4. Associated Knowledge Areas

## KA Code Knowledge Area

Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structure

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## Outcome #10

#### 1. Outcome

Success story 2: The Alabama Radon Program exhibited a display at the 2007 Shoals Home Builders Association's annual Spring Building and Remodeling Show Feb. 24-25, in Florence. ACES staff members involved were Radon REA Patricia W. Smith, Teresa McDonald, Colbert County CEC, Katrina Cole, Colbert County 4-H Extension Agent, Melanie Allen, Lauderdale County 4-H Extension Agent, Francine Creecy, Lauderdale County Extension Reporter, and Mary J. Andrews, Lauderdale County REA. Certified mitigator Leon Singletary was also on hand to answer technical questions. The booth highlighted the dangers posed by radon and emphasized methods of removing radon where high levels exist. One attendee said 'For 15 years I have been meaning to get around to doing this (test his home for radon). Okay, talk to me about radon and how do I do this?' The attendee purchased and used the test kit and found negligible levels of radon in his home. The ACES Alabama Radon Education Program booth was one of 81 booths at the show. Over 2,000 individuals attended the home show. Over 650 pieces of literature were distributed. In addition to distributing literature and explaining the dangers of radon and mitigation techniques, radon test kits were sold to interested citizens. More than 40 test kits were sold at this two-day event. Twenty-six (62%) test kits were used and five homes out of 22 valid tests (22%) indicated a need for mitigation. The Alabama Radon Education Program is a member of the builders association which has a membership of over 400 business firms from the Shoals area of northwest Alabama. Its membership includes the program's target audience of builders, remodelers, developers, subcontractors, suppliers, financial institutions, Realtors and other trades that are connected with the home building industry.

## 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

## 3a. Outcome Type:

Change in Action Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	42

## 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

#### What has been done

## **Results**

42 test kits were sold; 26 (62%) were used; 5 of the homes had elevated radon levels indicating a need for mitigation.

#### 4. Associated Knowledge Areas

KA Code Knowledge Area
 804 Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structure

#### Outcome #11

## 1. Outcome

Success story 3: The Radon in Alabama Web site, introduced in July 2000, offers a multitude of resources for those wishing to learn more about radon in Alabama. Alabama citizens can order test kits through Extension on the web site. Since its inception, 139 test kits have been purchased from the site, with 76 (54%) of the test kits used. Eight of 40 homes (20%) tested had elevated levels of radon, indicating a need to mitigate.

#### 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

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## 3a. Outcome Type:

Change in Action Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	139

## 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

## What has been done

## **Results**

139 test kits have been purchased from the site, with 76 (54%) of the test kits used. Eight of 40 homes (20%) had elevated levels of radon, indicating a need to mitigate.

## 4. Associated Knowledge Areas

KA Code	Knowledge Area
804	Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structure

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#### Outcome #12

#### 1. Outcome

Success story 4: Throughout the year, the Alabama Radon Program actively promotes radon education, but in January, special emphasis is made to pick up the pace with increased awareness emphasis for National Radon Action Month (NRAM). This year's activities took on a national flavor, with EPA offering a special web site of NRAM activities featured in each state: www.epa.gov/radon/rnactionmonth.html# Radon\_Events\_in\_Your\_Area, where citizens, radon industry, radon state programs and others could view the events, get ideas and/or join in the activities. In Alabama, national media interest for NRAM provided an added stimulus for local media interest in radon health risk promotions. News report headlines such as 'What you don't know about radon gas could kill you,' and 'Agent says radon a problem in the area,' helped draw attention to the radon message, resulting in a dramatic increase in radon test kit purchases and testing. Radio talk show hosts took a special interest in our message. Pat Smith, Radon Regional Extension Agent, and Teresa McDonald, Colbert County Extension Coordinator (CEC), were featured on the radio program, 'A Look at the Shoals,' and Deborah Mathews, Cleburne CEC, was featured several times during NRAM on WPIL FM Radio and WTDR FM Radio. In addition to the talk shows, numerous radio stations in north Alabama played the EPA-provided national PSAs which were localized for Alabama. We were also able to appear in several TV programs during the month. Pat Smith was on 'For Your Information,' a Shoals Community College TV show that was shown continuously in January and February, and 'Talk of the Town on the Light Side of the News' on WYAM TV 56. In Cleburne County, Mathews was fortunate to appear on the Wake-Up Alabama show on WJXS TV. In addition to county media efforts, the Alabama Department of Public Health sent out a statewide press release that generated awareness among health department associates as well as the news media. On the local level, the program's radon agents brought the radon health risk message to many local government officials, resulting in nine proclamations declaring January as National Radon Action Month within their communities, including a state proclamation signed by Governor Riley. The proclamations came from the Madison County Commission, Clay County Commission, Talladega County Commission, City of Killen, City of Sheffield, City of Muscle Shoals, Colbert County Commission, and the City of Tuscumbia. Many events were scheduled within each county. Highlights from each county include a Community Radon Awareness Forum arranged by Agent Walter Rodgers and Radon REA Pat Smith in Madison County with several community and business leaders discussing the importance of radon testing and prevention. In Clay County, CEC Marsha Moorehead distributed Radon Activity Books, Radon Ranger comic books and test kit coupons to 22 4-H Clubs and other youth groups in the county. In Cleburne County, CEC Deborah Mathews presented programs to Cleburne High School's anatomy and physiology classes and provided special radon informational assistance to home school groups at the Anniston Museum of Natural History. In Colbert County, CEC Teresa McDonald included NRAM information in the January/February 2007 Home Economics Newsletter distributed to 439 households. In Limestone County, CEC Betty Ann Broman presented a radon program to a local civic group as well as met with officials at Athens/Limestone Hospital to implement the Newborn Program. In Lauderdale County, Agent Melanie Allen provided a special reading activity at the Florence Public Library featuring well known children's literature character, Arthur, reading from the Radon Activity Book. In Lawrence County, 39 youth programs on radon awareness were provided to area youth by CEC Linda Robinson. In Talladega County, CEC Wanda Jurriaans provided a radon program to an RSVP seniors group. Pat Smith provided two Lunch and Learn seminars at Helen Keller Hospital for nurses who received one CEU for attending. She conducted numerous community group programs including the Cedar Garden Club, Cloverdale Community Center, Helen Keller Hospital, Killen Lions Club, Lawrence County Rotary Club, and the East Colbert Senior Center. A total of 74 radon test kits were sold during the group meetings. Exhibits were featured in a variety of locations: Helen Keller Hospital (Colbert County) and Athens-Limestone (Limestone) hospitals featured radon displays and brochures in each of their waiting rooms; the Cleburne County Library in Heflin and the Anniston Museum of Natural History (Cleburne and Calhoun counties); a radon display and test kits for sale at the Shades Mountain Baptist Church Health Expo (Jefferson); radon materials and the radon tabletop display at the Limestone County Market Street Office Building (Limestone); radon posters and a test kit display at the Florence Public Library (Lauderdale); community health fairs in Courtland, county health departments, and the local Moulton and Courtland libraries (Lawrence); and a radon display at the Homemakers Achievement Program and FCE multi-county planning meeting (Talladega). As a direct result of the media reports, exhibits and numerous NRAM programs, more than 900 test kits were purchased from county offices, the radon web site and by mail order during the quarter, and 478 tests were used. More than 400 homes were tested as a result of hearing the radon message during NRAM, with 22% of the homes indicating a need for mitigation.

## 2. Associated Institution Types

- •1862 Extension
- •1890 Extension

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#### 3a. Outcome Type:

Change in Action Outcome Measure

#### 3b. Quantitative Outcome

Year	Quantitative Target	Actual
2007	{No Data Entered}	901

## 3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

#### What has been done

#### Results

During January to March 2007, 901 tests were purchased; 488 test kits were used (54% usage rate) in 340 homes; 21% of the tests revealed elevated radon levels and the need for mitigation.

## 4. Associated Knowledge Areas

Human Environmental Issues Concerning Apparel, Textiles, and Residential and Commercial Structure

## V(H). Planned Program (External Factors)

## External factors which affected outcomes

- ? Government Regulations
- ? Other (Financial inability of clientele to pay for mitigating their homes.)

## **Brief Explanation**

The lack of state regulations for testing homes in real estate transactions and municipal building codes requiring the installation of radon systems detracts from the true picture a radon risk assessment in the state. Many people are reluctant to test their homes since real estate transactions might require them to disclose a previous radon test. Since there are no regulations, they don't want to impede the sale of their home. Also, we only know a small portion of the actual number of radon tests in a real estate transaction. If testing in a real estate transaction were regulated, we would have access to an accurate number.

If radon systems were required in new homes built, more Alabama citizens would be protected from the radon health risk. Currently, outside of the six municipalities that require radon systems, and the few builders who voluntarily install systems in all of their new homes, education by our program and the media are the only means to inform people about protecting their families from radon.

Many people who test their homes and find elevated radon levels cannot afford to fix their home, with the cost of mitigation between \$1200 to \$3000. Many homes are not even tested because they know they cannot fix their home even if they have a radon problem.

## V(I). Planned Program (Evaluation Studies and Data Collection)

## 1. Evaluation Studies Planned

? Other (Use of radon testing and test kit distribution data)

#### **Evaluation Results**

Evaluation of our individual programs, as well as our Radon Program as a whole, is determined by our measurable outcomes &ndash number of tests used versus purchased. Our extensive radon database provides distribution information by program and date, as well as test results data which provide outcome measuring results for the program.

Our evaluation assessment involves a comparison between prior year&rsquos efforts.

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#### **Key Items of Evaluation**

Any increase in measured outcome numbers is a plus, as it is that many more people who have shown increased knowledge with a change of behavior (tested their home), reduced their radon health risk (mitigated homes), or prevented radon from entering their home (building new homes radon-resistant). All of these actions will increase lives saved as a result of our efforts to educate citizens of the radon health risk. However, by monitoring specific programs or activities through our data and measured outcomes, we can maximize our efforts in our Program as a whole, thereby producing a more efficient product for Extension and our grantors, ADPH and EPA.

Since October 1997, we have distributed more than 26,000 test kits with 55% of them used. Our data reveals that 10,794 homes, apartments or school rooms have been tested, with 2268 or 21% needing mitigation.

Our program has estimated 146 mitigations took place in 2007, as well as 715 homes built radon-resistant, and 379

homes tested in real estate transactions. However, these are only voluntary reports and not the actual results of the program&rsquos efforts.

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